

Atlantic Richfield Company

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January 5, 2010

CERTIFIED – RETURN RECEIPT REQUESTED

Ms. Nadia Hollan Burke
Remedial Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street, SFD-8-2
San Francisco, CA 94105

**Subject: December 2009 Monthly Report, Yerington Mine Site, Lyon County, Nevada:
Administrative Order for Remedial Investigation and Feasibility Study, EPA Docket
No. 9-2007-0005; Administrative Order on Consent, EPA Docket No. 09-2009-0010**

Dear Ms. Hollan Burke:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency – Region 9 (EPA), please note the following monthly status report for Atlantic Richfield Company (ARC) RI/FS and removal action activities at the Yerington Mine Site (Site) during December 2009.

December 2009 Activities

Operations, Maintenance and Site Security

- Continued routine Site O&M, security and bird deterrent activities including operation of the propane cannons for the Arimetco ponds, with the exception of the VLT Pond as directed by EPA. The bird guard towers continued to be active due to water remaining in the ponds resulting from snow in early December.
- PWS evaporation pond levels: North Cell 0 feet; Middle Cell = <0.1 feet; South Cell 0.28 feet. Pan evaporation monitoring was discontinued December 1st until April 1, 2010.
- Arimetco heap leach fluid management system (FMS): 1) total estimated gallons transferred from VLTSP Pond to the FMS Evaporation Pond = 27,000 gallons; slot sediment pond (SSP) to the FMS Evaporation Pond = 84,000 gallons. Phase 1 Pond to Evaporation Pond = 0 gallons; 2) Pond levels: Phase 1 Pond = 1.50 foot; Evaporation Pond = 6.00 feet; VLT Pond = 8.25 feet; Slot 2 Pond = 14.75 feet.
- The Site received approximately 6 inches of snow during December. Snow remains on roads and tailings, with melting occurring only on southerly exposures. Approximately 0.30 inches of precipitation was recorded for the month of December 2009. Precipitation for the fourth quarter of 2009 was approximately 2.09 inches. Total precipitation for the year 2009 was approximately 4.64 inches.
- Provided the site safety orientation for Site visitors and workers.
- Patch welded the PWS evaporation pond south cell at three small locations on its east berm.

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December 2009 Activities - Continued

Other Site Activities

- Wayne Bull (GBI) continued daily monitoring of the ponds on behalf of USFWS
- CH2MHill personnel conducted well sampling activities December 1 and 2.
- USFWS personnel (Selena Werdon and Sonce de Vries) toured the Site on December 2 and met with Wayne Bull.
- Quatterra Alaska personnel Todd Bonsall, Eugene Spiering, Ken Brunk, and George Elioplilus toured the Site on December 8.
- R.S. Morrison, Tom Watkins, and Jonathan Gant of MIM checked core samples on December 9.
- Fawcett Electric personnel installed security lights on the exterior of the lab and GFI plugs in the interior of the lab on December 29.
- Sierra Geosynthetic personnel patched the HDPE liner on the east berm of the PWS evaporation pond south cell on December 29.
- Desert Engineering personnel repaired a broken water line at the former Arimetco lab location on December 29.

Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained on December 28-30.
- A pit lake water elevation of 4219.55 feet amsl was recorded on December 31, 2009 from the pressure transducer, an increase of 0.51 feet since November 25, 2009. The pit lake elevation has risen 3.038 feet since December 31, 2008.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Submitted the updated Site Health and Safety Plan - Revision 1, dated December 21, to include current contact information, ARC's HSSE requirements and procedures for characterizing and handling asbestos and radiological materials.
- Continued to compile groundwater elevation and chemical data for inclusion in the 3Q 2009 groundwater monitoring report and the 2009 Annual Groundwater Monitoring Report. Submitted the updated Site-Wide Groundwater Monitoring Plan - Revision 1 dated December 17.
- Submitted domestic well chemical data for EPA to distribute to domestic well owners/residents, and submitted the draft Domestic Well Monitoring Plan (DWMP; QAPP Addendum) to EPA on December 11. Compilation of 4Q 2009 domestic well monitoring data for inclusion in the 2009 Annual Domestic Well Monitoring Report.
- Initiated access agreements for, and continued database management activities associated with, the revised domestic well sampling program to be implemented in 1Q 2010.
- Continued the evaluation of groundwater data generated from the PWS Characterization Work Plan. Provided EPA with an alternative approach to the revised PWS Characterization Work Plan Addendum, and discussed alternatives with EPA (December 10 and 22).
- Attended a technical meeting with EPA and others on December 10, and participated in a follow-up teleconference on December 22 to discuss outstanding groundwater technical issues. Initiated an interim groundwater characterization work plan to address the 2010 groundwater monitor well installation program, to be performed as the next phase of the remedial investigation.
- Implemented revisions to the Shallow Zone DSR, based on EPA comments dated November 19, and per discussions with EPA during the December 10 technical meeting.
- Submitted the updated Human Health Risk Assessment Work Plan for the Inhalation Pathway - Revision 3 dated December 23.
- Submitted the Draft Process Areas Vadose Zone and Groundwater Characterization Work Plan dated December 29.
- Continued Site wildlife surveys, maintenance of wildlife observation database and preparation of weekly wildlife observation report.

December 2009 Activities - Continued

AOC Removal Actions

- Stopped all work associated with the evaporation ponds removal action, per EPA direction.
- Continued the preparation of the Draft Transite Pipe Removal Action Plan.
- Participated in two teleconferences (December 17 and 22) to discuss technical issues associated with, and the intent of, the scope of the Process Areas radiological materials characterization activities described in the AOC and attached SOW.
- Delayed start-up of the first phase of the electrical hazards removal action due to bad weather.

Site Issues

- Non-Routine pumping continues from the Slot Pond leak detection sump at a rate of approximately 1.5 gallons per minute. Surface expression of the leak adjacent to the Slot Pond continued in the form of frozen moisture.
- Accumulated snow, freezing fog and hazardous driving conditions during the month of December necessitated that extra precautions be taken for all Site activities.

Planned January/February 2010 Activities

- Continue routine O&M, site security, and bird deterrent activities. As requested, support USFWS' contractor inspection activities during work week business hours.
- Continue Site wildlife surveys, maintenance of wildlife observation database and preparation of wildlife observation reports.
- Continue to evaluate flow meters installed in the Arimetco FMS. Continue water balance calculations for the Arimetco FMS. Assess salt build-up conditions within the FMS (EPA 4-acre) evaporation pond.
- Submit updated project schedules to EPA for RI/FS and removal action activities.
- Continue groundwater elevation and pit lake level monitoring. Continue meteorological monitoring at AM-6.
- Submit the 3Q 2009 Groundwater Monitoring Report in January, and initiate the compilation of the 2009 Annual Groundwater Monitoring Report.
- Respond to EPA comments to the draft Domestic Well Monitoring Plan (DWMP) submitted in December 2009. Initiate access agreements for new domestic well owners for sampling of domestic wells in March 2010. Prepare for the 1Q 2010 domestic well sampling event.
- Compile data from the 4Q 2009 domestic well sampling event for EPA to distribute domestic well owners/residents, and initiate the compilation of the 2009 Annual Domestic Well Monitoring Report, pursuant to the draft DWMP.
- Respond to EPA comments to the revised Groundwater Monitoring Plan (DWMP) submitted in December 2009. Prepare for the 1Q 2010 monitor well sampling event.
- Respond to EPA comments on the Shallow Zone Characterization Data Summary Report (DSR), and submit a revised DSR.
- Pending approval by EPA of the PWS Characterization Work Plan Addendum - Revision 1 or modified approach, perform well rehabilitation and install piezometers. Submit PWS evaporation pond water balance information to assist decision making regarding the re-start of the PWS.
- Submit a work plan to EPA to perform borehole drilling, zonal groundwater sampling and the installation of additional groundwater monitor wells pursuant to the December 2009 groundwater technical meeting and follow-up teleconference. Initiate access agreements and other activities related to the zonal sampling and monitor well installation activities. These activities would be performed pursuant to a revised Groundwater Remedial Investigation (RI) Work Plan. Initiate preparation of a revised Groundwater RI Work Plan, per additional discussions with EPA.

Planned January/February 2010 Activities - Continued

- Submit the Draft Transite Pipe Removal Action Plan (RAP) by January 8. The RAP will include the results of transite pipe inspection and characterization activities (radiometric survey, laboratory analyses of asbestos and radiochemical concentrations), updated landfill information, and recommended radiometric field screening activities for placing the transite pipe and associated materials in the on-Site landfill.
- Initiate the first phase of the electrical hazards removal action (electrical contractor to be on-Site based on weather and other H&S considerations).
- As requested, pending final EPA sizing requirements, provide EPA with a landfill design for the placement of tires and administration building debris, as part of a removal action to be conducted by EPA.
- Further discuss EPA comments to the Draft Process Areas Radiological Characterization Work Plan – Revision 1. Submit responses to EPA comments on this work plan by January 8.
- Upon receipt of revised EPA comments, provide responses to comments to the Draft Site O&M Plan and a revised O&M Plan.
- Respond to EPA comments on the Draft Process Areas Vadose Zone and Groundwater Characterization Work Plan submitted in December 2009.
- Attend the Yerington Stakeholder's Meeting on January 7.

If you have any questions or comments, please feel free to contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Oman" with a stylized flourish at the end.

Jack Oman
Project Manager

cc: Dave Seter, EPA – via electronic mail
Mike Montgomery, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Joe Sawyer, NDEP – via electronic mail
Tom Olsen, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic mail
Phyllis Hunewill, Lyon County Commissioner – via electronic mail
Dennis Stark, Lyon County Manager – via electronic mail
Richard Faber, Lyon County Facilities Engineering – via electronic mail
Tom Grady, Nevada State Assembly – via electronic mail
Justin Whitesides, YPT – via electronic mail
Chairman Emm, YPT – via electronic mail
Dietrick McGinnis, McGinnis and Associates – via electronic mail
Chairman Reymus, WRPT – via electronic mail
Roxanne Ellingson, WRPT – via electronic mail

Ron Halsey, Atlantic Richfield Company - via electronic mail
James Lucari, Atlantic Richfield Company – via electronic mail
Roy Thun, Atlantic Richfield Company – via electronic mail
Don Pratt, Atlantic Richfield Company – via electronic mail
John Batchelder, EnviroSolve – via electronic mail
Jim Chatham, Atlantic Richfield Company – via electronic mail
Rich Curley, Curley and Associates, LLC – via electronic mail
David Peri, Peri and Sons – via electronic mail
Jim Sanford, MVEC – via electronic mail
Peggy Pauley, YCAG – via electronic mail
Lyon County Library System Central